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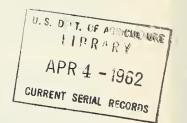


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Supplement to ARS 44-13 March 1962

X Supplement to:

TURKEY



PERFORMANCE TESTS, 1961 ×

Combined Summary of
Results of Central Turkey Meat
Production Tests
with Statistical Significance
of Differences Between Entries

Agricultural Research Service
UNITED STATES DEPARTMENT OF AGRICULTURE

FOREWORD

This is a combined summary of the performance data recorded at random sample turkey meat production tests in California, Kansas, Minnesota, Nebraska, North Carolina, North Dakota and Pennsylvania. This summary supplements ARS 44-13, Turkey Performance Tests, 1961, which reports results by individual tests and includes information on testing procedures and the sources of the stocks tested.

The data presented in this publication are Regressed Means and Least Significant Difference Ranges based on the combined results of all tests. This information makes possible comparisons among all turkey stocks entered in the seven tests. The following traits were analyzed: percent mortality, final live weight, feed conversion, eviscerated weight, eviscerated yield, breast width, body depth, keel length and percent U. S. Grade A based on overall quality.

This publication was compiled by the Poultry Research Branch, Animal Husbandry Research Division, Agricultural Research Service, from data supplied by the Test Supervisors. The statistical analyses were made by Biometrical Services, ARS.

INTRODUCTION

This publication is a combined summary of results obtained in random sample turkey meat production tests during 1961. Data are presented for each stock entered in one or more tests. The entries in each test consist of poults hatched from random samples of eggs representing the stocks tested. All entries within a test are treated the same with respect to housing, feeding, management, and disease control to avoid differences in performance due to differential treatment.

All tests follow similar basic principles of operation. However, there are differences between tests, largely due to differences in climatic conditions and other environmental factors, which may affect a simple summarization of results from several tests. For this reason, comparisons of this kind among stocks entered in different tests may be misleading.

The primary objective of this combined summary is to present the test results in a manner which will support a sound evaluation of all stocks tested; an evaluation based upon the nine traits analyzed. To accomplish this objective, the results of all tests are combined by accepted statistical procedures using adjustments for test differences. The results of these statistical analyses are published as a regressed mean for each trait and each stock. The regressed mean and accompanying least significant difference range for each trait provide a sound basis for comparing all stocks.

All Stocks are listed in alphabetical order by breeder's name with regressed mean and LSD range for each trait. Each least significant difference (LSD) range was calculated, using the approximate standard error of the stock regressed means and the significant studentized range values for 10 at the 0.05 level of probability. It is essential, when comparing the performance of two stocks, to determine whether the regressed mean of one stock falls within the LSD range of the other stock. If it does, the odds are less than 19 in 20 that a real difference exists. If the regressed mean of a stock falls outside the LSD range of another stock, the odds are at least 19 in 20 that a real difference in performance between the two stocks does exist.

To avoid misinterpretation of the data, the following explanatory material should be reviewed carefully.

HOW TO TELL WHETHER DIFFERENCES ARE REAL

Errors of two kinds may influence the results of even the most carefully designed and operated tests. The first kind of possible error is the chance deviation or unavoidable "sampling error" which may be made when a small sample of eggs or poults represents an entry or stock. The other kind of possible error is due to uncontrolled or unknown environmental differences which may occur between entries within a test in spite of effort to treat each entry exactly alike. The differences between two entries in a single test, then, may be due to one or both of the above chance variations rather than to a real difference in the performance capabilities of the two stocks. The effect of the first kind of error may be materially reduced by making comparisons among stocks entered in several tests. If all stocks compared were entered in the same tests, the simple averages could be utilized without adjustment.

The data (regressed means) published in this summary are calculated from the results reported by several tests. It is unlikely, therefore, that the value of the regressed means for any stock, though perhaps entered in only one test, will be identical in value with the performance data published by the test officials. These differences may be attributed to adjustments for test differences, the number of tests entered and the number of entry replications per test.

The statistical treatment applied to these performance data is designed to reduce the influence of non-genetic variation. However, this cannot be accomplished perfectly. Consequently, estimates or predictions of performance cannot be made with absolute precision. Reliable predictions, within prescribed limitations, can be made as to whether a difference in the reported performance of two stocks represents a real difference in their performances. These predictions involve the use of the least significant difference (LSD) ranges which have been calculated for each trait analyzed.

As the name implies, the least significant difference range prescribes the approximate limits of difference which may be due to chance. Differences which exceed the LSD range probably are due to inherent differences between the stocks. The LSD range is a reliable guide for the appraisal of differences, but is not infallible. Appraisals of differences, based on the LSD range, may be wrong but the probability of such errors are considered in its computation.

As an aid to the evaluation of significant differences among stocks, the approximate LSD range at the 0.05 level of probability (19:1 odds) is given for each regressed mean in the alphabetical listing of all stocks. The LSD range of a stock represents the regressed mean plus or minus the LSD (less one unit of measurement) at the 0.05 level of probability (refer to Analytical Procedures for complete explanation). As an example, the LSD for Feed Conversion is 0.13 lbs. at the 0.05 level of probability (19:1 odds). Stock 101 has a regressed mean of 3.61 and an LSD range from 3.73 (3.61 plus 0.12) to 3.49 (3.61 minus 0.12) for this trait. Stock 38 has a regressed mean of 3.59 and an LSD range from 3.71 (3.59 plus 0.12) to 3.47 (3.59 minus 0.12) for the same trait. Consequently, the two stocks are not significantly different from one another, since the regressed mean of either stock does not exceed the LSD range of the other. However, stock 114 with a regressed mean of 3.90 and stock 19 with a regressed mean of 3.77 are significantly different from stock 101 since their regressed means are not within the LSD range for this stock.

EXPLANATION OF TERMS AND ABBREVIATIONS

Stock:	A term used to identify the progeny of a specific breeding combination of turkeys. The	3 e
	breeding combinations may include pure strains, strain crosses, variety crosses, or	
	combinations thereof.	

Overall	The average of the test adjusted means for all stocks. This estimates what the overall
Mean:	average would have been had all stocks been entered in all tests.

Range:	The range represents the difference between the maximum and minumum performance among
	the 52 stocks, based on the regressed means.

Repeat-	This figure can vary from 0.00 to 1.00. The higher the figure, the greater is the likelihood
ability:	of stocks ranking in the same order from one test to another.

Correlation	This correlation measures the repeatability among replicates of the same stock entered in the
Among	same test. It may vary from 0.00 to 1.00, but cannot be lower than the repeatability of stock
Replicates:	performance between tests. The higher the correlation among replicates, the less need there
	is for replication of any stocks within tests. The difference between repeatability and the
	correlation among replicates is a measure of the importance of the test by stock interaction,

Test Adjustment Factor:	The amount by which a given test was above or below, the average of the seven locations (Nebraska was considered as two locations since their White and Bronze entries were at different locations) which reported data on all traits except feed conversion. Since feed conversion was reported by only four tests, this figure represents the amount above or below.
	conversion was reported by only four tests, this figure represents the amount above or below
	the average of these four tests. These factors were determined on an intra-stock basis by
	least squares analysis

Regressed	The test adjusted stock mean after weighting it according to the number of tests in which the
Mean:	stock was entered, the number of replicates per test, the repeatability, and the correlation
	among replicates.

F

Least The LSD prescribes the approximate limit of difference that may be due to chance. This Significant has been computed at the 5 percent level of probability and may be expressed as odds of

Difference: 19:1 against differences as large as the LSD being due to chance alone.

LSD These figures represent the regressed mean of a stock plus and minus the LSD at the 5 per-Range: cent level of probability (less one unit of measurement). For an explanation of how these

were computed for percent mortality, refer to the "Analytical Procedures" below.

Kind of BBB - Broad Breasted Bronze BSW - Beltsville Small White

Stock: BBW - Broad Breasted White MW - Medium White

ANALYTICAL PROCEDURES

This summary presents analyzed performance data from 52 stocks entered in seven random sample turkey meat production tests for 1961. These tests were conducted at nine different locations (Kansas, Minnesota, Nebraska Bronze, Nebraska White, North Carolina, North Dakota, Pennsylvania, California Pens and California Intermingled). The data submitted for eight traits for the seven locations (Kansas, Minnesota, North Carolina, North Dakota, Nebraska Bronze, Nebraska White, and Pennsylvania) and the data submitted for feed conversion from four locations (Kansas, North Carolina, Pennsylvania, and California Pens) were used for determination of the test effects in the computation of the regressed means. All data reported from all tests were included in the combined analyses.

The performance data by pens were analyzed, using least-squares procedures to obtain the test adjustment factors, Table 1, and the repeatability estimates, Table 2, for each trait. The correlation among replicates, Table 2, is the correlation among pen means for the same stock within a test. In order that the results for all traits have a comparable environmental basis, the test adjustment factors were expressed as a plus or minus deviation from the average (see preceding paragraph). These factors were then used to adjust the simple stock average for test differences in order to obtain the test adjusted stock averages (least-squares stock means). The adjusted stock averages were then regressed toward the overall mean (n), in order that differences in the number of tests entered and the number of replicates per entry might be considered.

Percent mortality from two weeks of age to end of test was converted to angles by the arc sin transformation prior to the analysis. (The mortality to end of test reported in ARS 44-13 includes the first two weeks mortality.) The test adjustment factors, repeatability, correlation among replicates, test adjusted stock averages, overall mean (1), regressed means and LSD range values were computed using the transformed percentage data. However, the test adjustment factors, Table 1, and the regressed means and LSD range values shown for this trait are given in percentages. This was accomplished by converting to percent after their computation. The arc sin transformation causes the difference between the regressed mean and the low LSD range value to be less than the difference between the regressed mean and the high LSD range value. Nevertheless, the LSD range for this trait is used in the same manner as for the other traits in determining those stocks which may be really different. Due to the extreme differences in mortality which were not closely associated with stock differences, the Regressed Means for this trait should be viewed with caution.

Regressed Mean =
$$\hat{\mu}$$
 + $\frac{r/C}{1 + (k-1)x + (1-Ck)_r}$ (\$)

where: $\hat{\mu}$ = the average of the test adjusted stock means.

r = repeatability.

x = the correlation among replicates.

k = the average number of replicates per test.

C = the diagonal inverse element for that stock. The reciprocal of C, i. e., $\frac{1}{C}$, is equal to nk if the assumption is made that the adjustments for test effects are made without error; where n is the number of tests entered.

 \hat{s} = the test adjusted stock average minus the overall mean $\hat{\mu}$,

Table 1. The Adjustment Factors Used to Adjust for Test Differences

Test	No. Pens	Stocks Tested	Final Live- Weight Hens Toms	Breast Width Hens Toms	Body Depth Hens Toms	Keel Length Hens Toms	Percent Mortality* (after 2 wks. of age)
California (Pens)	38	19	+ .94 + .12				04
California (Intermingle	d) 19	19	+ .5303				+.02
Kansas	12	12	+ .19 -2.17	+ .62 + .10	.00 + .21	+.2909	+.77
Minnesota	16	16	+ .08 +1.16	+1.05 +1.27	96 -1.23	+.0316	08
North Carolina	20	10	+ .81 +1.99	+ .42 +1.22	.00 + .12	63 +.15	.00
North Dakota	14	13	+ .19 + .86	+ .54 + .23	5934	+.13 +.12	13
Nebraska (Bronze)	17	16	2192	3824	+.76 + .27	+.2713	+. 16
Nebraska (White)	8	7	+ .2316	4466	+.91 + .68	+. 22 +. 07	36
Pennsylvania	17	17	-1.2875	-1.80 -1.91	12 + .31	29 +.03	01

	Evisce Wei		Evisce Yie		Perd Grad		Feed	
	Hens	Toms	Hens	Toms	Hens	Toms	Conversion*	
California (Pens)	+ . 33	06	-2.95	63	+ 9.88	+ 3.09	+.10	
California (Intermingled)	+ .32	03	63	02	+10.96	+ 4.06		
Kansas	+ .66	-1.51	+3.28	+ .89	- 4.41	+ 9.97	11	
Minnesota	+ .64	+1.55	+3.69	+2.26	- 8.03	- 7.68		
North Carolina	+ .51	+ .97	90	-2.56	+ 1.73	- 1.75	09	
North Dakota	06	+ .15	-1.47	-2.06	- 2.72	-10.35		
Nebraska (Bronze)	42	20	-1.66	+1.86	+ 5.15	+11.32		
Nebraska (White)	11	+ .28	-1.83	+1.46	+ 4.91	+12.90		
Pennsylvania	-1.21	98	-1.10	-1.29	+ 3.37	-14.41	+.10	

^{*} Combined Sexes

Table 2. Overall Means, Minimum and Maximum Regressed Means,
Estimates of Repeatability and the Correlation Among Replicates.

	Overall Means		Min	egress	Max	imum	Repeat- ability (r)		Correlation Among Replicates (x)		
Trait	Hens	Toms	Hens	Toms	Hens	Toms	Hens	Toms	Hens	Toms	
Final Live Weight	15.8	27.4	11.1	20.5	17.6	30.8	. 88851	. 84829	. 93806	. 89174	
Breast Width	4.6	5.0	4.2	4.3	5.6	6.2	.74885	.82486	. 74885	.82486	
Body Depth	6.8	9.0	6.1	8.1	7.1	9.5	.79398	.79930	.91386	. 92791	
Keel Length	6.4	7.6	5.8	6.4	6.8	8.1	.52757	. 88266	. 52757	. 88266	
Eviscerated Weight	12.3	22.5	9.1	17.1	14.5	25.4	.89678	.84592	.94300	.87248	
Eviscerated Yield	80.5	82.3	79.3	81.5	82.0	83.8	.43713	. 45334	. 43713	. 53437	
Percent Grade A	91.4	84.0	86.5	78.4	96.4	88.0	. 18529	.18403	. 18529	. 18403	
Feed Conversion*	3.	66	3, 53		3.90		. 59268		.79782		
Percent Mortality*	3.	3.1		1.9		4. l		.09574		. 09574	

^{*} Combined Sexes

All Stocks Entered, with Regressed Means and LSD Range for each Trait

	All Stocks Entered, with Re	gressed N	Means and LSI	Range f	or each '	Trait		
					Perce Morta	ent ality**		inal Weight
Stock Code	Name and Address of Breeder	Variety	Strain or Trade Name	Sex	Re- gress- ed Mean	LSD* Range	Re- gress- ed Mean	LSD* Range
101	Amerine Turkey Breeding Farms, Inc. Rt. 2, Box 783, Oakdale, California	BBB	Amerine	Toms	3.5	4.6	29.5	31.0 28.0 17.4 16.0
38	Anderson Turkey Farm Belchertown, Massachusetts	BBB	Anderson	Toms	2.9	3. 9 2. 1	30.8 17.6	32.3 29.3 18.3 16.9
80	Anderson Turkey Farm Belchertown, Massachusetts	BBW	Anderson Blockbuster	Toms	3.0	4.0 2.1	27.5 15.6	29.0 26.0 16.3 14.9
1	Browning Turkey Farms Winchester, Kentucky	BBB	Browning	Toms	4. 1	5.3 3.1	28.3 15.5	29.8 26.8 16.2 14.8
103	California Royal Turkeys, Inc. Box 184, Roseville, California	Auburn x BBB	California Royal	Toms	3.0	4.0	26.9 14.2	28.4 25.4 14.9 13.5
3	Farmers Hatchery Co. Wadena, Minnesota	BBB	Farmers	Toms	3.0	4.1	28.7 16.1	30.2 27.2 16.8 15.4
117	Gibbon Turkey Hatchery Shelton, Nebraska	BBB	Nebraska Hunter	Toms	3.3	4.4	29.3	30.8 27.8 16.5 15.1
17	Gozzi Breeding Farms, Inc. Guilford, Connecticut	BBW	Gozzi	Toms	2.5	3.4	25.5 14.8	27.0 24.0 15.5 14.1
123	Gozzi Breeding Farms, Inc. Guilford, Connecticut	BBW	Gozzi 300	Toms	3.2	4.2 2.3	26.8 14.8	28.3 25.3 15.5 14.1
6	Hart's Hatchery, Inc. Medford, Oregon	BBB	Hart- Schneider	Toms	2.6	3.5 1.8	27.3	28.8 25.8 16.0 14.6
98	Hildebrand Turkey Hatchery Seward, Nebraska	BBB	Hildebrand	Toms	3.2	4.2	28.5 15.7	30.0 27.0 16.4 15.0

^{**} Combined Sexes, from two weeks of age to end of test.

* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait

All Stocks Entered, with Regressed Means and LSD Range for each Trait												1		
Fee	d rsion**	Evisce			erated		east		ody		eel		rcent	
Re-	rsion	Wei Re-	gnt	Re-	eld	Re-	/idth	Re-	pth	Re-	ngth	Re-	ide A	
gress	_	gress-		gress	_	gress	_	gress-		gress-		gress-		Stock
ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	Code
Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	
3, 61	3.73	24.5	25.7	82.2	83.0							86.2	91.4	101
	3.49		23.3		81.4								81.0	
		13.4	14.0	80.4	81.3							87.6	91.9	
			12.8		79.5								83.3	
2 50		0.5	24.4				(0					0/ 0		
3. 59	3. 71 3. 47	25,4	26.6	82.3	83.1	5.6	6.0	9.0	9.2	7.7	7.8	86.3	91.5	38
	3.41	14.2	24.2	80.8	81.5 81.7	5, 1	5, 2 5, 3	7.0	8. 8 7. 1	6.8	7.6	92.2	81. 1 96. 5	
		X 1, L	13.6	00.0	79.9	J. 1	4.9	1.0	6.9	0.0	6.6	/2.2	87.9	
									. ,					
		22.5	23.7	82.0	82.8	5.2	5.6	9.1	9.3	7.5	7.6	86.4	91.6	80
			21.3		81.2		4.8		8.9		7.4		81.2	
		12.5	13.1	80.3	81.2	4.6	4.8	6.8	6.9	6.3	6.5	91.9	96.2	
			11.9		79.4		4.4		6.7		6. 1		87.6	
3. 73	3, 85	23.1	24.3	81.5	82.3	4.5	4.9	9.3	9.5	7.9	8.0	82.0	87.2	1
	3.61		21.9		80.7		4.1	,,,	9.1		7.8		76.8	
		12.3	12.9	79.6	80.5	4.3	4.5	7.0	7.1	6.5	6.7	92.1	96.4	
			11.7		78.7		4.1		6.9		6.3		87.8	
3, 65	3.77	22 1	22.2	02.2	0.2 1							05.5	00.7	102
3, 05	3. 53	22.1	23.3	82.3	83.1							85.5	90.7 80.3	103
	3. 33	11.4	12.0	80.4	81.3							91.2	95.5	
			10.8		79.5							,	86.9	
		23.4	24.6	82.0	82.8	4.6	5.0	9.5	9.7	8.1	8.2	79.6	84.8	3
		12.0	22.2	00.0	81.2	4.2	4.2	7 1	9.3	, ,	8.0	0.1 5	74.4	
		12.8	13.4	80.0	80.9 79.1	4.3	4.5 4.1	7. 1	7.2 7.0	6.6	6.8	91.5	95. 8	
			12.2		19.1		4.1		7.0		0.4		87.2	
		24.0	25.2	82.1	82.9	4.7	5.1	9.2	9.4	7.9	8.0	82.6	87.8	117
			22.8		81.3		4.3		9.0		7.8		77.4	·
		12.5	13.1	79.9	80.8	4.6	4.8	6.9	7.0	6.4	6.6	93.0	97.3	
			11.9		79.0		4.4		6.8		6.2		88.7	
3. 64	3.76	21.2	22.4	82.7	83.5	5. 2	5.6	8.8	9.0	7.4	7 5	84.6	90 0	17
5. 01	3, 52	21.2	20.0	02.1	81.9	5. 4	4.8	0,0	8.6	7.4	7.5	84.0	89.8 79.4	1 /
	1	12.0	12.6	80.7	81.6	4.6	4.8	6.6	6.7	6.3	6.5	91.3	95.6	
			11.4		79.8		4.4		6.5		6.1	, ,	87.0	
	}								}					
		22.0	23.2	82.1	82.9	5. 1	5.5	8.9	9.1	7.4	7.5	84.3	89.5	123
		12.0	20.8	80.6	81.3	4.7	4,7	6.6	8.7	6.3	7.3	01.5	79.1	
		12.0	11.4	00,0	81.5	4. /	4.9 4.5	0, 0	6. 7 6. 5	6.3	6.5	91.5	95.8 87.2	
					. , .		1, 3		0, 5		0.1		01,2	
3.65	3.77	22.4	23.6	82.0	82.8	5.0	5.4	9.1	9.3	7.7	7.8	83.8	89.0	6
	3, 53		21.2		81.2		4.6		8.9		7.6		78.6	
		12.3	12.9	80.6	81.5	4.5	4.7	6.8	6.9	6.4	6.6	91.2	95.5	
			11.7		79.7		4.3		6.7		6.2		86.9	
		23.3	24.5	81.9	82.7	4.4	4.8	9.2	9.4	7.9	8.0	84. 1	89.3	98
			22.1		81.1		4.0		9.0	,	7.8		78.9	, ,
		12.5	13.1	80.2	81.1	4.6	4.8	7.0	7.1	6.5	6.7	89.8	94.1	
			11.9		79.3		4.4		6.9		6.3		85.5	

^{**} Combined Sexes

^{*} If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

	All Stocks Entered, with Regre	ssed Mea	ns and LSD R	ange for	each Tra	it (Conti	inued)	
					Perc			inal
		Strain Mortality** Liv						Weight
Stock	Name and Address of Breeder	Variety		Sex	gress-			
Code	Name and Address of Breeder	variety	Name	Sex	ed	LSD*	gress- ed	LSD*
Oode			1101110		Mean	Range	Mean	Range
26	Hilltop Turkey Farm & Hatchery	BBB	Schmidt	Toms	2.8	3.8	27.7	29.2
	Rt. 3, McPherson, Kansas					2.0		26.2
	•			Hens			14.8	15.5
								14.1
228	Janes Bar Nothing Ranch, Inc.	BBB	Janes	Toms	3.1	4.1	26.0	27.5
220	Austin, Texas	DDD	Male #1	101115	3.1	2.2	20.0	24.5
	,			Hens			15.2	15.9
								14.5
110	Janssen Farms Hatcheries	BBB	Janssen	Toms	3.4	4,4	29.2	30.7
110	Zeeland, Michigan	DDD	"Dutch Boy"	101115	3. 4	2.5	27.2	27.7
	, _B			Hens		_, _	16.7	17.4
								16.0
111	Janssen Farms Hatcheries	BBW	Janssen	Toms	3.3	4.4	26.4	27.9
111	Zeeland, Michigan	DDW	"Dutch Boy"	101115	3.3	2.4	20.4	24.9
				Hens			14.9	15.6
								14.2
7	Jensen Turkey Ranch	BBB	J-X	Toms	3. 1	4.1	28,5	30.0
'	Santa Ana, California	DDD	3 - A	101113	3. 1	2.2	20,5	27.0
	 , 			Hens			15.6	16.3
								14.9
118	Jerome Turkey Hatchery	BBW	Superline	Toms	3.1	4.1	27.2	28.7
110	Barron, Wisconsin	DD **	Superime	101115	3. 1	2.2	21.2	25.7
ļ	,			Hens			15.1	15.8
								14.4
113	Johnson Turkey Hatchery	BBB	Johnson	Toms	3.3	4.4	26.7	28.2
113	Rose Hill, North Carolina		5 011115 011	101115	3. 3	2.4	20.1	25.2
	·			Hens			15.9	16.6
								15.2
25	Keithley-McPherrin, Inc.	BBW	Keithley	Toms	3.3	4.4	26.2	27.7
23	P. O. Box 158, Sunnymead, California	DD	retuitey	101115	3. 3	2.4	20.2	24.7
:				Hens			14.9	15.6
								14.2
92	Kimber Turkey Breeding Farms	BBB	KB-33	Toms	3.0	4.0	29.0	30.5
72	5695 E. Shields Ave., Fresno, Calif.	DDD	TED-33	101115	3.0	2.2	27.0	27.5
				Hens			16.2	16.9
								15.5
105	Kimber Turkey Breeding Farms	BBW	KW-66	Toms	3.1	4.2	27.0	28.5
105	5695 E. Shields Ave., Fresno, Calif.	DDII	2217 - 00	101113	3.1	2.3	21.0	25.5
				Hens			15.1	15.8
								14.4
114	Marston's Turkeyland	BSW	Marston	Toms	2.4	3 2	21 4	22.0
	Zephyrhills, Florida	2011	Marston	TOIRIS	4. 4	3.3	21.4	22.9 19.9
				Hens			11.5	12.2
					Ŀ			10.8

^{**} Combined Sexes, from 2 weeks of age to end of test

^{*} If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (continued)

	. 1					1			ody				ontinued	
Fee	ed rsion**		erated eight		erated eld	1	east idth		ody epth	Len	eel	•	rcent ide A	
Re-	T	Re-	I	Re-	I	Re-	I I	Re-	T	Re-	l gui	Re-	T A	1
gress	-	gress-		gress-	1	gress-		gress-		gress-		gress-		Stock
ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	Code
Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	
3.64	3.76	22.9	24.1	82.5	83.3	5.1	5.5	8.9	9. 1	7.5	7.6	85.9	91.1	26
	3.52		21.7		81.7		4.7	,	8.7		7.4	00.7	80:7	
		11.8	12.4	80.1	81.0	4.7	4.9	6.8	6.9	6.3	6.5	92.1	96.4	
			11.2		79.2		4.5		6.7		6.1		87.8	
		21.9	23.1	83.2	84.0	5.8	6.2	8.6	8.8	7.2	7.3	82.7	87.9	228
			20.7		82.4		5.4	, ,	8.4	, -	7.1		77.5	
		12.4	13.0	81.1	82.0	4.7	4.9	6.6	6.7	6.3	6.5	90.5	94.8	
			11.8		80.2		4, 5		6.5		6. 1		86.2	
3. 58	3.70	24.0	25.2	82.2	83.0	5. 6	6.0	8.9	9.1	7.6	7.7	82.6	87.8	110
3, 30	3.46	21.0	22.8	02.2	81.4	3.0	5.2	0, /	8.7	1.0	7.5	02.0	77.4	110
		13.5	14.1	80.8	81.7	4.9	5. 1	6.8	6.9	6.5	6.7	90.2	94.5	
			12.9		79.9		4.7		6.7		6.3	,	85.9	
3.61	3.73	21.5	22.7	81.5	82.3	5.1	5.5	8.8	9.0	7.2	7.3	85.7	90.9	111
	3.49		20.3		80.7		4.7		8.6		7.1		80.5	
		11.8	12.4	79.6	80.5	4.7	4.9	6.6	6.7	6.2	6.4	95.3	99.6	
			11.2		78.7		4.5		6.5		6.0		91.0	
		23.7	24.9	82.8	83.6	5.1	5.5	9.1	9.3	7.8	7.9	83.7	88.9	7
		23.1	22.5	02.0	82.0	J. 1	4.7	7. 1	8.9	1.0	7.7	03,1	78.5	_ ′
		12.5	13.1	80.1	81.0	4.5	4.7	6.9	7.0	6.5	6.7	91.0	95.3	
			11.9		79. 4		4.3	0,,	6.8	0.0	6.3	/1.0	86.7	
												i		
		22.2	23.4	81.9	82.7	4.6	5.0	9.1	9.3	7.5	7.6	85.5	90.7	118
			21.0		81.1		4.2		8.9		7.4		80.3	
		12.0	12.6	80.1	81.0	4.5	4.7	6.8	6.9	6.3	6.5	90.3	94.6	
			11.4		79.2		4.3		6.7		6.1		86.0	
3. 62	3.74	22.1	23.3	82.7	83. 5	5, 5	5.9	8.7	8.9	7.4	7.5	82.5	87.7	113
3. 02	3.50	6 2.1	20.9	02. 1	81.9	5,5	5.1	0. /	8.5	7.4	7.3	84.5	77.3	113
	3, 30	12.9	13.5	80.9	81.8	4.9	5. 1	6.7	6.8	6.6	6.8	91.4	95.7	
		,	12.3	,	80.0	/	4.7	0. 1	6.6	0,0	6.4	/1.1	87.1	
												:		
3.71	3.83	21.5	22.7	82.2	83.0	4.8	5.2	9.0	9.2	7.4	7.5	82.8	88.0	25
	3. 59		20.3		81.4		4.4		8.8		7.3		77.6	
		11.9	12.5	80.0	80.9	4.4	4.6	6.7	6.8	6.3	6.5	91.7	96.0	
			11.3		79.1		4.2		6.6		6.1		87.4	
3.72	3.84	23.9	25.1	82.3	83.1	5. 0	5.4	9.0	9.2	7.8	7.9	85.3	90.5	92
3. 12	3.60	23.)	22.7	02.3	81.5	5.0	4.6	7.0	8.8	1.0	7.7	03.3	80.1	92
		13.0		80.2	81.1	4.7	4.9	6.8	6.9	6.5	6.7	91.3	95.6	
			12.4		79.3		4.5	•••	6.7		6.3	/1.5	87.0	
					·						1			
3.71	3.83	22.0	23.2	81.7	82.5	4.8	5.2	9.2	9.4	7.6	7.7	86.3	91.5	105
	3. 59		20.8		80.9		4.4		9.0		7.5		81.1	
		12.0	12.6	79.9	80.8	4.5	4.7	6.9	7.0	6.3	6.5	93.9	98.2	
			11.4		79.0		4.3		6.8		6.1		89.6	
3.90	4.02	17.4	18.6	81.6	92.4							07.0	02.0	114
3. 70	3. 78	17,4	16.2	01.0	82.4 80.8							87.8	93.0	114
	3. 10	9.1	9.7	80.5	81.4							95.3	82.6 99.6	
			8.5		79.6					_		75.5	91.0	
** C-	mbined	Comes		•		1	1		1				, - , -	

^{**} Combined Sexes

^{*} If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

	All Stocks Entered, with Regre	ssed Mea	ns and LSD F	Range for	each Tra	it (Cont	inued)	
		Percent				Fi	nal	
					Mort	ality**	Live	Weight
			Strain		Re-		Re-	
Stock	Name and Address of Breeder	Variety	or Trade	Sex	gress-		gress-	
Code			Name		ed	LSD*	ed	LSD*
		-			Mean	Range	Mean	Range
62	Meadowbrook Turkey Farms	BBB	Meadow-	Toms	1.9	2.7	28.4	29.9
	R. D. 2, Box 810, Roseville, California		brook			1.3		26.9
			MBX-100	Hens			15.6	16.3
				i				14.9
9	Menefee Turkey Ranch, Inc.	BBB	Menefee	Toms	3.3	4.3	27.4	28.9
	R. D. 1, Yamhill, Oregon					2.4		25.9
				Hens			16.0	16.7
			e e e e e e e e e e e e e e e e e e e					15.3
14	Miller Hatchery, Ltd.	BBB	Ploen	Toms	3.1	4.1	26.8	28.3
	Winnipeg, Manitoba, Canada					2.2		25.3
				Hens			14.4	15.1
								13.7
189	Morrow, J. M., Farms	BBB	Morrow	Toms	3, 3	4.3	27.2	28.7
109	Carthage, Missouri	DDD	Str. #2	Toms	3, 3	2.4	21,2	25.7
	Carmage, Missouri		βίι. π2	Hens		2. 1	15.0	15.7
				Hens			15.0	14. 3
								11.5
215	Morrow, J. M., Farms	ввв	Morrow	Toms	3.0	4.1	27.1	28.6
	Carthage, Missouri		Str. #3			2.2		25.6
				Hens			14.8	15.5
								14.1
226	Newport Turkey Breeding Farm	BBB	Newport	Toms	3.4	4.5	26.9	28.4
	Rt. 1, Box 19, Tangent, Oregon		Certified			2.5		25.4
				Hens			14.6	15.3
								13.9
100	Nielele E. L. B. et l. Fermer I.	DDD	NT! -1 -1 -		2 0	20	27.6	29.1
190	Nicholas Turkey Breeding Farms, Inc.	BBB	Nicholas	Toms	2.8	3.8	21.0	26.1
	865 W. Napa St., Sonoma, California			Hens			15.8	16.5
				Hens			15,0	15.1
								15.1
220	Nicholas Turkey Breeding Farms, Inc.	BBB	Nicholas	Toms	3. 2	4.2	29.3	30.8
	865 W. Napa St., Sonoma, California	20 20 20	Male Line			2.3		27.8
				Hens			17.4	18.1
								16.7
19	Nicholas Turkey Breeding Farms, Inc.	BBW	Nicholas	Toms	3.4	4.5	27.3	28.8
	865 W. Napa St., Sonoma, California					2.5		25.8
				Hens			15.5	16.2
								14.8
229	Norbost Turkey Grewers Association	BBB	Selma	Toms	3.2	4.3	28.4	29.9
229	Norbest Turkey Growers Association Salt Lake City, Utah	DDD	Hunter 326	TOTILS	3, 4	2.4	20.4	26.9
	Balt Bake Oity, Otali		Trancer 520	Hens		2	15.9	16.6
				110110			,	15.2
55	Nordman, C. L. & Sons	ввв	Nordman	Toms	2.9	3.9	27.9	29.4
	2835 S. Los Banos Hwy., Merced, Calif.					2.1		26.4
			}	Hens			15.7	16.4
		1						15.0

^{**} Combined Sexes, from 2 weeks of age to end of test

^{*} If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (continued)

All Stocks Entered, with Regressed Means and LSD Range for each Trait (continued)														
Fee			erated	4	erated		east	Во	,		eel	Percent		
Conver	sion**		ight	Yie	eld		idth	De	pth	Len	gth	Grade A		
Re-		Re-		Re-		Re-		Re- gress-		Re- gress-		Re-		Stock
gress- ed	LSD*	gress-	LSD*	gress- ed	LSD*	gress.	LSD*	ed	LSD*	ed	LSD*	gress- ed	LSD*	Code
Mean	Range		Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	
3.61	3.73	23.4	24.6	82.3	83.1	4.9	5.3	9.0	9.2	7.7	7.8	84.4	89.6	62
3.01	3.49	23. 1	22.2	02.3	81.5	1.,	4.5	7.0	8.8	' ' '	7.6	01.1	79.2	02
		12.6	13.2	80.6	81.5	4.6	4.8	6.8	6.9	6.5	6.7	91.8	96.1	
			12.0		79.7		4.4		6.7		6.3		87.5	
3.65	3.77	22.6	23.8	82.3	83.1	5, 7	6.1	8.8	9.0	7.4	7.5	78.4	83.5	9
	3.53	12.0	21.4		81.5		5.3	/ 0	8.6	/ 4	7.3		73.2	
		13.0	13.6	80.8	81.7	4.9	5.1	6.8	6.9	6.4	6.6	88.8	93.1 84.5	
			12.4		79.9		4.7		6.7		6.2		04, 3	
		21.8	23.0	81.8	82.6	4.4	4.8	9.1	9.3	7.6	7.7	83.9	89.1	14
			20.6		81.0		4.0		8.9		7.5		78.7	
		11.5	12.1	80.3	81.2	4.5	4.7	5.8	6.9	6.4	6.6	92.0	96.3	
			10.9		79.4		4.3		6.7		6.2		87.7	
						. ,	-							
		22.1	23.3	81.7	82.5	4.6	5.0	9.0	9.2	7.8	7.9	83.3	88.5	189
		12.0	20.9 12.6	80.4	80.9 81.3	4.6	4.2	6.9	8.8 7.0	6.4	7.7 6.6	91.6	78.1 95.9	
		12.0	11.4	00.4	79.5	7.0	4.4	0.9	6.8	0.4	6.2	71.0	87.3	
					. ,				0.0		0, 5		01.5	
		22.2	23,4	81.9	82.7	4.9	5.3	9.0	9.2	7.8	7.9	85.0	90.2	215
			21.0		81.1		4.5		8.8		7.7		79.8	
		12.0	12.6	80.4	81.3	4.4	4.6	6.7	6.8	6.4	6.6	91.5	95.8	
			11.4		79.5		4.2		6.6		6.2		87.2	
3.65	3.77	22.1	22.2	02.2	02 0							03 5	0.7. 7	22/
3.03	3.53	22,1	23.3	82,2	83.0 81.4							82.5	87.7 77.3	226
	3.33	11.8	12.4	80.8	81.7							94.7	99.0	
			11.2	0000	79.9							/ 2.	90.4	
3.59	3, 71	22.9	24.1	82.9	83.7	5.4	5.8	9.0	9.2	7.5	7.6	84.9	90.1	190
	3.47		21.7		82.1		5.0	, _	8.8		7.4		79.7	
		12.8	13.4	81.0	81.9	4.7	4.9	6.8	6.9	6.3	6.5	86.5	90.8	
			12.2		80.1	}	4.5		6.7		6.1		82.2	
3, 53	3.65	25.1	26.3	83.8	84.6	6.2	6.6	8.7	8.9	7.5	7.6	83.6	88.8	220
	3.41		23.9		83.0		5.8		8.5		7.4	03.0	78.4	
		14.5	15.1	81.7	82.6	5.6	5.8	6.8	6.9	6.4	6.6	89.9	94.2	
			13.9		80.8		5.4		6.7		6.2		85.6	
			_											
3.77	3.89	22.3	23.5	81.6	82.4	4.9	5.3	9.2	9.4	7.6	7.7	86.6	91.8	19
	3.65	12.4	21.1 13.0	80.0	80.8 80.9	4.6	4.5 4.8	6.9	9.0 7.0	6.5	7.5 6.7	92.4	81.4	
		12.4	11.8	00.0	79.1	4.0	4.4	0.9	6.8	0.5	6.3	94.4	96.7 88.1	
			11.0		. /		** *		0.0		0, 3		00.1	
		23.3	24.5	82.1	82.9	5.1	5, 5	8.9	9.1	7.7	7.8	85.6	90.8	229
			22.1		81.3		4.7		8.7		7.6		80.4	
		12.7	13.3	80.3	81.2	4.4	4.6	6.8	6.9	6.4	6.6	89.0	93.3	
			12.1		79.4		4.2		6.7		6.2		84.7	
3.64	3.76	23.0	24.2	82.5	83.3	5.1	5, 5	0 0	0.3	7.6	7 7	94 7	90 0	55
J. 01	3.52	23.0	21.8	02.5	81.7	5, 1	4.7	9.0	9. 2 8. 8	1.0	7.7	84.7	89.9 79.5	33
		12.7	13.3	80.9	81.8	4.7	4.9	6.7	6.8	6.3	6.5	90.5	94.8	
			12.1		80.0		4.5		6.6		6.1	,	86.2	
** Com	bined S	Sexes												
₩ TC +1					. 1 6	22	1	T G.D.						

^{*} If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

Stock Name and Address of Breeder Variety Or Trade Name Strain Or Trade Regress Gand LSD Gand LSD		All Stocks Entered, with Regre	1	1	l l				
Name and Address of Breeder Variety Strain or Trade Name Sex S									
Stock Name and Address of Breeder Variety Or Trade Name Name Name Name Address of Breeder Name Name Name Name Address of Breeder Name Name Name Address of Breeder Name Name				Strain			carrey		W G I g I I
Code	Stock	Name and Address of Breeder	Variety	or Trade	Sex	1			
Description	Code			Name			LSD*	_	LSD*
McMinnville, Oregon						Mean	Range	Mean	Range
230 Pinola Hatchery R. D. 3, Shippensburg, Pennsylvania BBW Martin Toms 3, 1 4, 1 25, 3 26, 8 23, 8 48, 12, 9 13, 6 14, 3 12, 9 12, 12, 12, 13, 14, 14, 15, 14, 15, 14, 15, 16, 16, 16, 16, 16, 16, 16, 16, 16, 16	217	Oregon Giant Turkeys	BBB	Oregon	Toms	2.9	3.9	26.8	28.3
230 Pinola Hatchery R. D. 3, Shippensburg, Pennsylvania BBW Martin Toms R. D. 3, Shippensburg, Pennsylvania BBW Martin Toms R. D. 3, Shippensburg, Pennsylvania BBB Pozo Toms R. D. 2, Shippensburg, Pennsylvania BBB Pozo Toms R. D. 2, Shippensburg, Pennsylvania BBB Pozo Toms R. D. 2, Amherst, Massachusetts BBB Pozo Toms R. D. 1, Reinholds, Pennsylvania BBB Shearer Toms R. D. 1, Reinholds, Pennsylvania BBB Spilson Toms R. D. 1, Reinholds, Pennsylvania R. Spilson Toms R. D. 1, Reinholds, Pennsylvania R. Spilson Toms R. D. 2, Amherst, Massachusetts R. Spilson Toms R. D. 1, Reinholds, Pennsylvania R. Spilson R.		McMinnville, Oregon		Giant			2.1		
Pinola Hatchery R. D. 3, Shippensburg, Pennsylvania BBW Martin Toms 3, 1 4, 1 25, 3 26, 8 23, 8 14, 3 12, 9					Hens			15.1	
R. D. 3, Shippensburg, Pennsylvania Hens 2, 2 13, 6 14, 3 12, 9									14.4
R. D. 3, Shippensburg, Pennsylvania Hens 2, 2 13, 6 14, 3 12, 9	220	Dinala Hataharu	DDW	Martin	Tome	3 1	4 1	25.3	26.8
106 Pozo Turkey Ranch Box 54, Santa Margarita, California BBB Pozo Toms 3.2 4.2 26.8 28.3 25.3 15.0 15.7 14.3 15.2 15.9 16.6 15.2 15.2 16.6 15.2 15.2 15.3 16.6 15.2 15.3 16.6 15.2 15.3 16.6 15.2 15.3 16.6 15.2 15.3 16.6 15.2 15.3 16.6 15.2 15.3 16.6 15.3 16.6 15.2 15.3 16.6 15.3 16.6 15.2 15.3 16.6 15.3 16.6 15.2 15.3 16.6 15.5 16.5 15.5 16.5 15.5 16.5 15.5 16.5 15	230		DD 11	Waitin	101113	3. 1		25.5	ł.
Pozo Turkey Ranch BBB Pozo Toms 3.2 4.2 26.8 28.3 25.3 15.0 15.7 14.3 15.0 15.7 14.3 15.0 16.5		it. D. 3, Shipponsburg, Telmisyrvania			Hens			13.6	
Box 54, Sanía Margarita, California BBB Rose - A Linda Hens									
Box 54, Sanía Margarita, California BBB Rose - A Linda Hens									
Rose-A-Linda Turkey Farms BBB Rose-A-Linda Hens 15.0 15.7 14.3 27.8 29.3 26.3 15.0 15.7 14.3 27.8 29.3 26.3 15.0 15.2 26.3 15.0 15.2 26.3 15.0 15.2 26.3 15.0 15.2 26.3 15.0 27.8 29.3 26.3 15.0 15.2 27.3 26.3 15.2 27.3 26.3 15.2 27.3 26.3 15.2 27.3 26.3 15.4 16.1 14.7 22 Segars Turkey Breeding Ranch Box 1008, Turlock, California BBW Segars Toms 4.0 5.1 27.3 28.8 25.8 16.1 14.7	106		BBB	Pozo	Toms	3, 2	1	26.8	
Rose-A-Linda Turkey Farms Rose-A-Linda Rose-A		Box 54, Santa Margarita, California			11		2, 3	15.0	
Rose-A-Linda Turkey Farms 7842 Elmont Ave., Elverta, California BBB Rose-A-Linda Linda Linda Rens Rose-A-Linda Rens Rens Rens Rose-A-Linda Rens Rose-A-Linda Rens Rose-A-Linda Rens Rose-A-Linda Rens Rens Rose-A-Linda Rose-A-Linda Rose-A-Linda Rens Rose-A-Linda Rose-Rose-Rose-Rose-Rose-Rose-Rose-Rose-					Hens			15.0	
Table Tabl									14.5
Table Tabl	28	Rose-A-Linda Turkey Farms	BBB	Rose-A-	Toms	3.6	4.7	27.8	29.3
Schultz Fred W. & Son BBW Schultz Toms 3.0 4.0 27.8 29.3 26.3 15.4 16.1 14.7 14.7 14.7 14.7 14.7 14.7 15.1 13.7 15.6 14.9 15.6 14.9 15.6 14.9 15.6 14.9 15.6 14.9 15.6 14.9 15.6 14.9 15.6 14.9 15.6 14.9 15.6 14.1 15.5 14.9 15.6 14.1 15.5 14.9 15.6 14.1 15.5 14.9 15.6 14.1 15.5 14.1 15		7842 Elmont Ave., Elverta, California		Linda			2.7		26.3
Schultz, Fred W. & Son Box 246, Croton Falls, New York BBW Schultz Toms 3.0 4.0 27.8 29.3 26.3 15.4 16.1 14.7 16.1 14.7 17.2 17.3 28.8					Hens			15.9	1
Box 246, Croton Falls, New York									15.2
Box 246, Croton Falls, New York	221	Schultz Fred W & Son	BRW	Schultz	Toms	3.0	4.0	27 8	29 3
BBW Segars Toms 4.0 5.1 15.4 16.1 14.7	221		DD "	Denaitz	101115	3.0	1		
Segars Turkey Breeding Ranch Box 1008, Turlock, California BBW Segars Toms 4.0 5.1 27.3 28.8 25.8 16.0 14.6 16.0					Hens			15.4	
Box 1008, Turlock, California Hens 3.0 15.3 16.0 14.6						-			14.7
Box 1008, Turlock, California Hens 3.0 15.3 16.0 14.6					_				
Shaw, Glenn F. BBW Shaw Toms 2.5 3.5 26.5 28.0 25.0 14.4 15.1 13.7 16.6 Shearer, Robert K. R. D. 1, Reinholds, Pennsylvania BBB Shearer Toms 3.0 4.0 26.8 28.3 2.2 25.3 14.9 15.6 14.2 27.4 28.9 25.9 14.8 15.5 14.1 15.5 14.1 16 Waite's Turkey Hatchery BBB Waite's King Size Hens Waite's Turkey Farm BBW Pilgrim Toms 2.8 3.8 2.2 2.7 24.7 2	22		BBW	Segars	Toms	4.0		27.3	
Shaw, Glenn F. R. D. 2, Amherst, Massachusetts BBW Shaw Toms 2.5 3.5 26.5 28.0 25.0 14.4 15.1 13.7 14.4 15.1 13.7 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.2 15.6 14.1 16 Waite's Turkey Hatchery BBB Waite's King Size Hens Size Hens Size Hens Size Hens Size Hens Size		Box 1008, Turlock, California			Hens		3.0	15 3	
R. D. 2, Amherst, Massachusetts Hens 1.8 14.4 15.1 13.7					110110				
R. D. 2, Amherst, Massachusetts Hens 1.8 14.4 15.1 13.7									
Hens	99		BBW	Shaw	Toms	2.5		26.5	
Shearer, Robert K. R. D. 1, Reinholds, Pennsylvania BBB Shearer Toms 3.0 4.0 26.8 28.3 25.3 14.9 15.6 14.2 28.9 25.9 14.8 15.5 14.1 27.4 28.9 25.9		R. D. 2, Amherst, Massachusetts			T.T			14.4	
Shearer, Robert K. R. D. 1, Reinholds, Pennsylvania BBB Shearer Toms 3.0 4.0 26.8 28.3 25.3 14.9 15.6 14.2 27.4 28.9 25.9 14.8 15.5 14.1 16 Waite's Turkey Hatchery Eldon, Missouri BBB Waite's King Size Hens Waite's Turkey Farm Rehoboth, Massachusetts BBW Pilgrim White Hens White Hens White Hens Waite's 15.4 16.1 1					Hens			14.4	
R. D. 1, Reinholds, Pennsylvania Hens 2.2 14.9 15.6 14.2									13.1
Hens 14.9 15.6 14.2 27.4 28.9 25.9	66	Shearer, Robert K.	BBB	Shearer	Toms	3.0	4.0	26.8	28.3
216 Sjulson's Turkey Hatchery BBB Sjulson Toms 3.0 4.1 27.4 28.9 25.9 14.8 15.5 14.1 16 Waite's Turkey Hatchery Eldon, Missouri BBB Waite's Toms 3.2 4.3 29.3 30.8 27.8 16.4 15.0 16.4 15.0 16.4 16.4 15.0 16.4 16.1 16.4 16.1 1		R.D. 1, Reinholds, Pennsylvania					2.2		1
Sjulson's Turkey Hatchery St. Hilaire, Minnesota BBB Sjulson Toms 3.0 4.1 27.4 28.9 25.9 14.8 15.5 14.1					Hens			14.9	1
St. Hilaire, Minnesota St. Hilaire, Minnesota									14.2
St. Hilaire, Minnesota St. Hilaire, Minnesota				G: 1	_		4 1	27.4	30.0
Hens Hens 14.8 15.5 14.1 15.6 14.1 16 Waite's Turkey Hatchery Eldon, Missouri BBB Waite's King Size Hens 15.7 16.4 15.0 16.3 Warren's Turkey Farm Rehoboth, Massachusetts BBW Pilgrim White Hens 15.4 16.1 15.4 16.1	216		BBB	Sjulson	loms	3.0		21.4	
Waite's Turkey Hatchery BBB Waite's Toms 3.2 4.3 29.3 30.8 27.8 15.7 16.4 15.0		St. Hilaire, Minnesota			Hens		2.2	14.8	
Eldon, Missouri King Size Hens 2. 4 15. 7 16. 4 15. 0 Warren's Turkey Farm Rehoboth, Massachusetts BBW Pilgrim White Hens 2. 8 3. 8 26. 2 27. 8 16. 4 15. 0									
Eldon, Missouri King Size Hens 2. 4 15. 7 16. 4 15. 0 Warren's Turkey Farm Rehoboth, Massachusetts BBW Pilgrim White Hens 2. 8 3. 8 26. 2 27. 8 16. 4 15. 0									
63 Warren's Turkey Farm Rehoboth, Massachusetts BBW Pilgrim Toms 2.8 3.8 26.2 27.7 24.7 15.4 16.1	16		BBB	1	Toms	3.2		29.3	
63 Warren's Turkey Farm Rehoboth, Massachusetts BBW Pilgrim Toms 2.8 3.8 26.2 27.7 24.7 16.1		Eldon, Missouri		King Size	Hone		2.4	15 7	1
63 Warren's Turkey Farm Rehoboth, Massachusetts BBW Pilgrim Toms 2.8 3.8 26.2 27.7 24.7 16.1					Hens			13, 1	
Rehoboth, Massachusetts White									
Hens 15.4 16.1	63	Warren's Turkey Farm	BBW		Toms	2.8		26.2	
		Rehoboth, Massachusetts		White			2.0	15.4	
			I		Hens			15.4	

^{**} Combined Sexes, from 2 weeks of age to end of test

st If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (continued)

Feed Eviscerated Eviscerated Breast Body Keel										Per	1			
Conver				Wid		Dep	,	Len		Gra				
Re-	1	Re-	1	Re-		Re-	i	Re-	1	Re-		Re-	l	Stock
gress-		gress-		gress-		gress-		gress-		gress-		gress-		Code
ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	Code
	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range		Range		Range	
		22.1	23.3	82.4	83.2	5.2	5.6	8.8	9.0	7.3	7.4	84.6	89.8	217
		12.2	20.9	00.0	81.6	4.8	4.8	6.6	8.6	/ 2	7.2	02.5	79.4 96.8	
		12.3	12.9	80.9	81.8	4.8	5.0 4.6	0.0	6.7	6.3	6.5	92.5	88.2	
			111.1		00.0		1.0		0.5		0.1		00.2	
3.67	3.79	21.1	22.3	83.0	83.8	4.7	5.1	9.0	9.2	7.4	7.5	83.9	89.1	230
	3.55		19.9		82.2		4.3		8.8		7.3		78.7	
		10.7	11.3	79.8	80.7	4.2	4.4	6.6	6.7	6.2	6.4	92.4	96.7	
			10.1		78.9		4.0		6.5		6.0		88.1	
3.61	3.73	22.0	23.2	82.2	83.0							88.0	93.2	106
3. 01	3.49	22.0	20.8	02.2	81.4							00.0	82.8	100
		12.1	12.7	80.7	81.6							96.4	100.0	
	-		11.5		79.8	}							92.1	
2 50	2 71	22 1	24.2	02.0	02 7	E 2	c 7	0 0	0 1	7.5	7 /	0.5.3	00.5	2.0
3. 59	3.71	23.1	24.3	82.9	83.7	5.3	5.7	8.9	9.1	7.5	7.6	85.3	90.5	28
	3. 11	12.9	13.5	81.2	82.1	4.9	5.1	6.7	6.8	6.2	6.4	91.5	95.8	
		120,	12.3	01.2	80.3	/	4.7	0	6.6	"	6.0	71.5	87.2	
3.62	3.74	23.3	24.5	82.9	83.7	4.8	5.2	9.2	9.4	7.6	7.7	84.2	89.4	221
	3.50		22. 1		82.1		4.4		9.0		7.5		79.0	
		12.5	13.1	80.6	81.5	4.4	4.6	6.9	7.0	6.2	6.4	92.5	96.8	
			11.9		79.7		4.2		6.8		6.0		88.2	
3.74	3.86	22.3	23.5	81.7	82.5	4.8	5.2	9.2	9.4	7.6	7.7	84.5	89.7	22
	3.62	:	21.1		80.9		4.4	, .	9.0		7.5		79.3	
		12.3	12.9	80.1	81.0	4.5	4.7	6.9	7.0	6.3	6.5	93.4	97.7	
			11.7		79.2		4.3		6.8		6.1		89.1	
3.70	3.82	22.1	23.3	82.9	83.7	5.1	5.5	9.1	9.3	7.4	7.5	83.9	00 1	99
3.10	3.58	22.1	20.9	02.7	82.1	3.1	4.7	9.1	8.9	1.4	7.3	03.9	89.1 78.7	99
		11.5	12.1	80.0	80.9	4.5	4.7	6.7	6.8	6.2	6.4	91.8	96.1	
			10.9		79.1	-	4.3		6.6		6.0	, - , -	87.5	
3.61	3.73 3.49	22.1	23.3	82.4	83.2	5.7	6.1	8.5	8.7	7.4	7.5	81.7	86.9	66
	3.49	12.2	20.9	81.2	81.6	4.9	5. 3 5. 1	6.8	8.3	6.2	7.3	89.6	76.5	
		12.2	11.6	01.2	80.3	7. 7	4.7	0.0	6.7	0.2	6.0	07.0	85.3	
						:			}					
		22.3	23.5	81.7	82.5	4.7	5.1	9.3	9.5	8.0	8.1	83.3	88.5	216
		11.0	21.1	00.	80.9		4.3	_	9.1	, -	7.9		78.1	1
		11.8	12.4	80.1	81.0	4.4	4.6	7.0	7.1	6.5	6.7	91.5	95.8	
			11.2		19.2		4.2		0.9		6.3		87.2	
3.79	3.91	23.8	25.0	81.8	82.6	4.3	4.7	9.5	9.7	8.1	8.2	82.3	87.5	16
	3.67		22.6		81.0		3.9		9.3		8.0		77.1	
		12.4	13.0	79.3	80.2	4.3	4.5	7.1	7.2	6.5	6.7	88.1	92.4	
			11.8		78.4		4.1		7.0		6.3		83.8	
3.63	3.75	21.4	22.6	81.8	82.6							03 5	00 7	42
	3.51	21. 1	20.2	01.0	81.0							83.5	88.7 78.3	63
		12.4	13.0	80.5	81.4							93.3	97.6	
	1		11.8		79.6								89.0	
** Com	bined a	Sexes			1	I	· '		I	1				

^{*} If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

					Perc	ent ality**		nal Weight
Stock Code	Name and Address of Breeder	Variety	Strain or Trade Name	Sex	Re- gress- ed Mean	LSD*	Re- gress- ed Mean	
219	Washore Turkey Association 920 Stark, Portland, Oregon	ВВВ	Hamilton	Toms	3.1	4.1 2.3	27.7	29. 2 26. 2 15. 8 14. 4
213	Welkona Turkeys, Inc. Kalona, Iowa	ввв	Wheeler	Toms	2.8	3.8	29.8	31.3 28.3 17.0 15.6
214	Welp's Breeding Farm Bancroft, Iowa	ввв	Welp B1020	Toms	3.3	4.4	28.0	29.5 26.5 16.0 14.6
121	Wenzel Turkey Farm Garden Prairie, Illinois	BBB	Wenzel	Toms Hens	3.0	4.0	26.9	28. 4 25. 4 16. 0 14. 6
64	Wilford Hatchery & Breeding Farm Elyria, Ohio	BBW	Wilford 4C94	Toms Hens	2.8	3.8	25.2	26. 7 23. 7 15. 1 13. 7
107	Williams Hatchery Eox 2, Oakdale, California	BBB	Williams	Toms Hens	3.2	4.3	29.2	30.7 27.7 16.9 15.5
227	Williams Hatchery Box 2, Oakdale, California	ввв	Williams SC	Toms Hens	3. 3	4.3	29.7	31.2 28.2 17.2 15.8
218	Wrolstad, Clifford Rt. 3, Box 293, Molalla, Oregon	MW	Wrolstad	Toms	2.8	3.8	20.5	22.0 19.0 11.8 10.4

^{**} Combined Sexes, from 2 weeks of age to end of test

^{*} If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (continued)

All Stocks Entered, with Regressed Means and LSD Range for each Trait (continued))	
Fee	d	Evisc	erated	Evisc	erated	Bre	east	Во	dy	Keel		Per		
Conve	rsion**	We	ight	Yie	ld	Wi	dth	De	pth	Len	gth	Gra	de A	
Re-		Re-		Re-		Re-		Re-		Re-		Re-		Stock
gress-		gress-	1	gress-		gress.		gress-		gress-		gress.		Code
ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	ed	LSD*	Code
Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	
3.60	3.72	22.7	23.9	82.0	82.8	5.1	5.5	9.0	9.2	7.6	7.7	83.3	88.5	219
	3.48		21.5		81.2		4.7		8.8		7.5		78.1	
		12.3	12.9	81.2	82.1	4.8	5.0	6.7	6.8	6.4	6.6	92.0	96.3	
			11.7		80.3		4.6		6.6		6.2		87.7	
		24.3	25.5	82.0	82.8	4.7	5.1	9.4	9.6	8.0	8.1	83.2	88.4	213
			23.1		81.2		4.3		9.2		7.9		78.0	
		13.0	13.6	79.8	80.7	4.4	4.6	7.0	7.1	6.6	6.8	90.6	94.9	
			12.4		78.9		4.2		6.9		6.4		86.3	
		22.9	24 1	82.0	03 0	4.7	<i>r</i> 1	9.2	0 4	7 0	7.0	0.4.0	00.0	2.14
		44.9	24.1	82.0	82.8	4.7	5. 1 4. 3	9.2	9.4	7.8	7.9	84.8	90.0	214
		12.3	12.9	80.4	81.3	4.5	4.7	6.9	7.0	6.5	7.7 6.7	91.5	79.6 95.8	
		12. 3	11.7	00,4	79.5	4. 5	4. 3	0.9	6.8	0, 5	6.3	91.5	87.2	
	-		11.1		17.3		7. 3		0,0		0, 3		01.4	
		21.9	23.1	81.8	82.6	4.8	5.2	9.0	9.2	7.6	7.7	82.7	87.9	121
		. ,	20.7		81.0		4.4	, · · -	8.8		7.5		77.5	
		12.3	12.9	80.5	81.4	4.5	4.7	6.8	6.9	6.5	6.7	92.5	96.8	
			11.7		79.6		4.3		6.7		6.3		88.2	
3.70	3.82	21.1	22.3	82.8	83.6	5.2	5.6	8.6	8.8	7.3	7.4	87.6	92.8	64
	3. 58		19.9		82.0		4.8		8.4		7.2		82.4	
		11.6	12.2	80.5	81.4	4.7	4.9	6.6	6.7	6.2	6.4	90.8	95.1	
	1		11.0		79.6		4.5		6.5		6.0		86.5	
3, 56	2 60	24.0	25 2	02.2	0.2 0	r 2	r /	0 0	0 0		5 0	00.6	0.5	105
3. 50	3. 68 3. 44	24.0	25.2	82.2	83.0	5, 2	5.6	9.0	9.2	7.7	7.8	80.0	85.2	107
	3.44	13, 1	13.7	80.7	81.4 81.6	4.8	4.8 5.0	6.8	8.8	6, 5	7.6	01.1	74.8	
		13, 1	12.5	00.7	79.8	4.0	4.6	0.8	6.7	0,5	6.7	91.1	95.4	
			12, 5		17.0		7.0		0.7		0.3		86.8	
3.63	3.75	24.6	25.8	82.6	83.4							86.0	91.2	227
	3.51		23.4	0=11	81.8							00.0	80.8	221
		13.4	14.0	80.7	81.6							91.2	95.5	
			12.8		79.8							/1.0	86.9	
													/	
3.86	3.98	17.1	18.3	82.7	83.5	4.8	5.2	8.1	8.3	6.4	6.5	79.7	84.9	218
	3.74		15.9		81.9		4.4		7.9		6.3		74.5	
		9.4	10.0	82.0	82.9	4.4	4.6	6.1	6.2	5.8	6.0	92.1	96.4	
			8.8		81.1		4.2		6.0		5.6		87.8	

^{**} Combined Sexes

st If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

Information in this report was compiled by the Animal Husbandry Research Division, Agricultural Research Service, from data supplied by the Test Supervisors and analyzed by Biometrical Services, ARS.



Growth Through Agricultural Progress